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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

PHAM, TAMMY T

ART UNIT

PAPER NUMBER

2629

NOTIFICATION DATE

DELIVERY MODE

01/27/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ip.legal@covidien.com

Office Action Summary	Application No. 10/508,916	Applicant(s) MCCREARY ET AL.	
	Examiner TAMMY PHAM	Art Unit 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 December 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-13 and 36-38 is/are pending in the application.
- 4a) Of the above claim(s) 36-38 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 18 December 2009 has been entered.

Response to Amendment

2. Claims 1-9, 14-35, has been cancelled. Claims 36-38 has been withdrawn. Claims 10-13, 26-38 are pending. Claims 10-13 are considered below.

Response to Arguments

3. Applicant's arguments submitted on 23 November 2009 have been considered but are not persuasive.

§ 103 Rejection

4. **In regards to independent claim 10**, Applicant submits that the amended claim language overcomes the prior art of record. In particular, that “*there is no location on Sherbeck’s screen that lies completely within at least two zone pairs (Remarks 5).*” This is not persuasive.

5. First, there is no support for this newly amended claim language. Second, even that there is support for it, the claim language remains broad. In particular, as explained in the previous office action of 21 August 2009, Sherbeck teaches of at least four zones (shown below in diagrams 1-4). The touch event (Diagram 5), is completely within at least two zone pairs (where the two zone pairs are shown at least in two examples which includes the zone pairs in Diagrams 1, 3; and the zone pairs in Diagrams 2, 4). Hence, Sherbeck continues to read upon the claim language as currently stated.

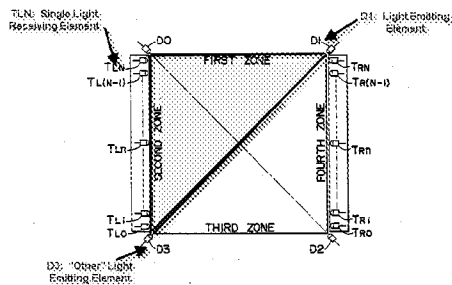


Diagram 1: First Triangular Zone

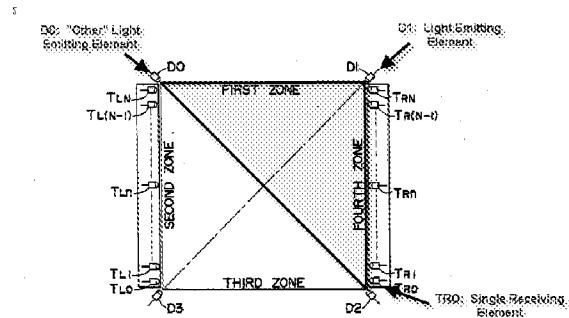


Diagram 2: Second Triangular Zone

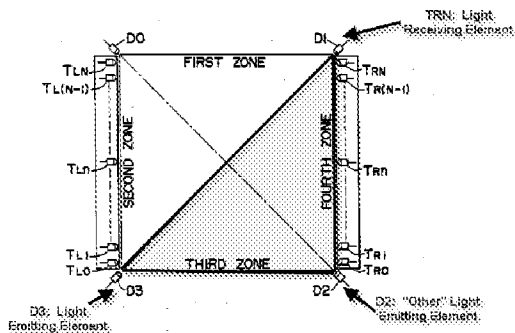


Diagram 3: Third Triangular Zone

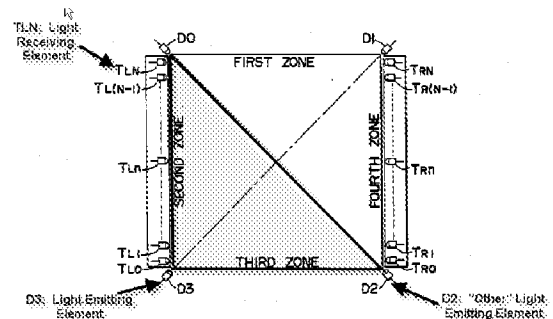


Diagram 4: Fourth Triangular Zone

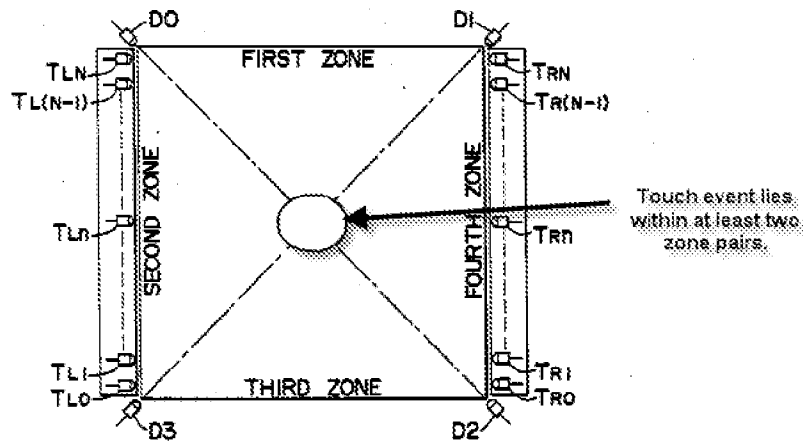


Diagram 5: Touch Event Completely Within at Least Two Zone Pairs

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 10-13 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

7. **In regards to independent claim 10**, the newly amended claim language teaches that *“the touch event lies completely within at least two zone pairs (lines 9-10).”* However, there is no support for this in the original disclosure. For example, the figures of the current application seem to fail to depict that a touch event (Fig. 15, item 60) lies completely within two zone pairs

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(Fig. 15, items 58). Appropriate correction is necessary in order to maintain consistency between the claims and the original disclosure.

8. **In regards to claims 11-13**, these claims are being rejected for being dependent upon improper claim 10.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claim 10 is rejected under 35 U.S.C. 102(b) as being anticipated by Sherbeck (US Patent No: 4,703,316).

10. **In regards to independent claim 10**, Sherbeck teaches of a method of determining the location of a touch event within a display area (Fig. 1) surrounded by a touch frame having a plurality of light emitting elements (Fig. 1, item D0-D3) and a plurality of light receiving elements (Fig. 1, items TLN-TRN) forming a plurality of triangular zones of light beam paths, each triangular zone being defined by the portion of the display area between (a) a light beam path extending from a light emitting at one end of a row of light emitting elements (Fig. 1, item D0) to a single light receiving (Fig. 1, item TRO) and (b) a light beam path extending from a light emitting element at the other end of the row of light emitting elements (Fig. 1, item D1) to the single light receiving element (Fig. 1, item TRO), the number and positioning of receivers (Fig. 1, item TRO) being sufficient to form partially overlapping zone pairs such that the touch

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event lies completely within at least two zone pairs (for example, if the touch event was in the middle of the display of Figure 1, as shown above in Figure 5), the method comprising:

11. monitoring each of the zone pairs for blockage of at least one light beam path; and
12. upon such blockage, calculating the location of the touch event associated with the blockage based on the slopes and the end points of at least two intersecting blocked light beam paths from a first zone pair and two intersecting blocked light beam paths from a second zone pair (Fig. 1, column 4, lines 45-70).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sherbeck (US Patent No: 4,703,316) in view of Casebolt (US Patent No: 5,355,149)

14. **As for claim 11**, Sherbeck fails to teach of randomly activate the light emitting elements, one at a time; and

15. monitor the output of each light receiving element associated with the activated light emitting element for an output indicative of a blocked light beam path.

16. Casebolt teaches of randomly activate the light emitting elements (Fig. 1, item 16), one at a time; and

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17. monitor the output of each light receiving element (Fig. 1, item 18) associated with the activated light emitting element (Fig. 1, item 16) for an output indicative of a blocked light beam path (column 2, lines 55-60).

18. It would have been obvious to one with ordinary skill in the art at the time the invention was made to combine the random activation of Casebolt with the touch frame of Sherbeck. This combination provides a touch screen display that compensates for the effect of changes in ambient light, temperature, component aging and environmental variations without overdriving the light emitters (Casebolt, column 2, lines 33-37).

19. **As for claim 12**, Sherbeck as modified by Casebolt above in claim 11, teaches that the processor (Casebolt, Fig. 2, item 32) is further programmed to activate the light emitting elements (Casebolt, Fig. 1, item 16) at pseudo random intervals (Casebolt, column 2, lines 58-64).

20. **As for claim 13**, Sherbeck as modified by Casebolt above in claim 11, teaches that the processor (Casebolt, Fig. 2, item 32) is further programmed to activate the light emitting elements (Casebolt, Fig. 1, item 16) in a pseudo random sequence (Casebolt, column 2, lines 58-64).

Conclusion

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tammy Pham whose telephone number is (571) 272-7773. The examiner can normally be reached on 8:00-5:30 (Mon-Fri).
22. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on (571) 272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.
23. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TP
18 January 2010

Tammy Pham
/Tammy Pham/
Examiner, Art Unit 2629